

**UNITED STATES PATENT APPLICATION**

**OF**

**HYUNG-BAE LEE**

**FOR**

**BACKSIDE DECORATION ELEMENT FOR PIN-TYPE EARRING**

**MCKENNA LONG & ALDRIDGE LLP**  
**1900 K STREET, N.W.**  
**WASHINGTON, D.C. 20006**  
**Tel: (202) 496-7500**  
**Fax: (202) 496-7756**

## **BACKSIDE DECORATION ELEMENT FOR PIN-TYPE EARRING**

### **BACKGROUND OF THE INVENTION**

#### **Field of the Invention**

[01] The present invention relates to a backside decoration element for a pin-type earring, and more particularly, to a backside decoration element for a pin-type earring capable of inserting a clutch that guides an earring pin to a longitudinal hole into an outer cover having a predetermined shape made of a silicon material.

#### **Background of the Related Art**

[02] Generally, in conventional backside decoration elements (which are commonly referred to as 'clutchs' in this field) for pin-type earrings, as shown in FIG. 1A, there is widely used a clutch 2 of the type having a pierced hole 24 formed on the central portion thereof and wings 21 for guiding an earring pin through a guide groove 23 by using tension. As the clutch 2 with the wings 21 is used for a long period of time, the pierced hole 24 is worn out and gets loose. Besides, the tension of the wings 21 becomes weakened to reduce its spring force such that the earring should be exchanged. Also, the size of the clutch is so small that it is often lost or it is difficult to pick it up by a user's hand.

[03] In case where the pin-type earring with a very expensive jewelry 31 has no backside decoration element or has other replacement, there is a possibility that it may be lost with ease.

[04] Moreover, the clutch 2 with the wings 21 has a restriction in that it should need a predetermined thickness for maintaining the shape of a predetermined material, without any change.

[05] To solve these problems, the present inventor has proposed a novel backside decoration element that is disclosed in Korean Utility Model Registration No. 260655. This is shown in FIG. 1B, wherein the backside decoration element 1 includes an outer cover made of a silicon material with a conventional type of clutch 2 that has wings 21 for guiding the earring pin 32 through a guide groove (not shown in this figure), the outer cover being provided with a pierced longitudinal hole 12 formed at the central portion thereof and an edge part 11 protruded on the lower end portion thereof.

[06] The formation of the wings 21 of the clutch 2 enables the earring pin 32 to be guided and fixed, but this does not give any help in reducing the weight of the material.

[07] Besides, as the number of use times for the clutch 2 with the wings 21 is increased, the pierced hole 24 of the clutch

2 that is in direct contact with the longitudinal hole 12 becomes worn out and finally gets loose.

#### SUMMARY OF THE INVENTION

[08] Accordingly, the present invention is directed to a backside decoration element for a pin-type earring that substantially obviates one or more problems due to limitations and disadvantages of the related art.

[09] An object of the present invention is to provide a backside decoration element for a pin-type earring that prevents a pierced hole of a clutch from being worn out and loose, avoids the damage of a user's ears, and overcomes the restriction that the clutch should be manufactured in a predetermined thickness for the purpose of maintaining the shape of a jewelry material without any change.

[10] Another object of the present invention is to provide a backside decoration element for a pin-type earring that reduces a possibility that it may be lost due to its relatively small size and removes difficulties in picking it up.

[11] Additional advantages, objects, and features of the invention will be set forth in part in the description which follows and in part will become apparent to those having ordinary skill in the art upon examination of the following or may be learned from practice of the invention. The objectives and other

advantages of the invention may be realized and attained by the structure particularly pointed out in the written description and claims hereof as well as the appended drawings.

**[12]** To accomplish these and other objects of the present invention, there is provided an improved backside decoration element for a pin-type earring of the type which has a clutch, a longitudinal hole, and an outer cover made of a silicon material with an edge part protruded therefrom, wherein the improvement comprises: the longitudinal hole formed on the central portion thereof, the longitudinal hole getting smaller at the top portion thereof and larger at the bottom portion thereof; the clutch having a plurality of fixing projections with which an earring pin is guided to the longitudinal hole; and the outer cover for covering the longitudinal hole and the clutch, the outer cover having the edge part protruded on the upper end portion thereof.

**[13]** Preferably, the longitudinal hole gets smaller at the top portion thereof and larger at the bottom portion thereof, for the purpose of preventing the earring pin from being removed therefrom.

**[14]** The clutch is provided with the plurality of fixing projections that are adapted to be disposed in the inside of the outer cover so as to prevent the outer cover and the clutch from being separated or damaged.

[15] It is to be understood that both the foregoing general description and the following detailed description of the present invention are exemplary and explanatory and are intended to provide further explanation of the invention as claimed.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

[16] The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this application, illustrate embodiment(s) of the invention and together with the description serve to explain the principle of the invention. In the drawings;

[17] FIGS. 1A and 1B are perspective views illustrating the coupled relationship between each of conventional clutch-type backside decoration elements and a pin-type earring;

[18] FIG. 2 is a perspective view illustrating the coupled relationship between a backside decoration element according to the present invention and a pin-type earring;

[19] FIG. 3 is a perspective view illustrating the configuration of the backside decoration element for the pin-type earring according to the present invention;

[20] FIG. 4 is a sectional view taken along the line A-A in FIG. 3; and

[21] FIG. 5 is a sectional view for the manufacturing process for the backside decoration element according to the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[22] Reference will now be made in detail to the preferred embodiments of the present invention, examples of which are illustrated in the accompanying drawings.

[23] Referring to FIG. 2, the backside decoration element 10 for a pin-type earring according to the present invention is provided with a longitudinal hole 12 formed on the central portion thereof in such a manner as to be smaller at the top portion thereof and larger at the bottom portion thereof, a clutch 2 with a plurality of fixing projections 25 for guiding an earring pin 32 through the longitudinal hole 12, and an outer cover 40 made of a silicon material for covering the longitudinal hole 12 and the clutch 2, the outer cover having an edge part 41 protruded on the upper portion thereof.

[24] According to the backside decoration element 10 of the present invention, the edge part 41 formed on the upper portion of the outer cover 40 includes an edge face 42 and a surplus space portion 50.

[25] FIG.3 is a perspective view illustrating the configuration of the backside decoration element for the pin-type

earring according to the present invention, and FIG. 4 is a sectional view taken along the line A-A in FIG. 3.

[26] As shown, the longitudinal hole 12 gets larger in diameter as it is close to the lower portion thereof. This enables the earring pin 32 to be fixed by the restoring force of the outer cover 40 made of silicon, at a time when the earring pin 32 is inserted into the smaller portion of the longitudinal hole 12. As a result, the earring pin 32 after insertion is not easily drawn at all from the longitudinal hole 12.

[27] The clutch 2, which is disposed in the inside of the outer cover 40, is provided with the plurality of fixing projections 25 disposed in the outer cover 40 such that they prevent the outer cover and the clutch from being separated and damaged.

[28] The backside decoration element 10 for the pin-type earring according to the present invention is produced in the following order.

[29] As shown in FIG. 5, the backside decoration element 10 of the present invention is formed in such a manner that the clutch 2 is thinner in thickness than a conventional one, and a longitudinal hole mold 200 that gets smaller at the top portion thereof and larger at the bottom portion thereof is disposed on the central portion thereof. Then, the clutch 2 and the longitudinal hole mold 200 are disposed on the central portions

of silicon molds 210 and 210' having a predetermined shape. Next, silicon is poured and silicon rubber is covered thereon by using a heat press.

[30] When the earring pin 32 is inserted into the longitudinal hole 12 connected to the lower end of the clutch 2, the backside decoration element 10 for the pin-type earring as produced in the afore-mentioned order is capable of guiding the earring pin 32 to the longitudinal hole 12 formed on the top end portion thereof with the help of the tension of the clutch 2 and the restoring force of the silicon, and fixing the earring pin 32 in a firm manner with the help of the restoring force of the silicon outer cover 40.

[31] The conventional clutch 2 includes the guide groove provided for the formation of the tension thereof, which is not substantially necessary, and also includes the wings 21 made of precious metals, which causes the production cost of the backside decoration element to be high. In addition, this makes the production process more complicated.

[32] The backside decoration element 10 according to the present invention is provided with the clutch 2 that is substantially thinner in thickness than the conventional one because of the restoring force of the silicon, thereby maintaining its shape with the silicon outer cover, without any change, such that it can reduce the production cost.

Additionally, the production process becomes more simplified, and the production time and the probability for the generation of bad products can be all reduced.

[33] Furthermore, the backside decoration element 10 of the present invention is provided with the surplus space portion 50 spaced by a predetermined distance from the edge face 42 such that it can be easily picked up by a user or separated from her ear, and with the edge part 41 protruded made of silicon such that it can be easily worn or is not bounded well in case where it falls, thereby preventing the possibility of the loss.

[34] As clearly appreciated from the foregoing, the backside decoration element for the pin-type earring removes the problems of the production cost, unstability, and the possibility of the loss the conventional clutch has had, and especially, reduces the generation of the damage to the user's ear with the silicon material, and fixes the earring pin by using the restoring force of the longitudinal hole around the silicon outer cover, such that it can be used semi-permanently. Also, the clutch is surrounded with the silicon outer cover, which enables the thickness and weight of the clutch to be reduced. This also enables the whole production cost to become substantially low.

[35] Also, the backside decoration element is provided with the edge part formed on the upper end portion of the outer cover,

which enables the possibility of loss to be decreased and further enables the wearing to be carried out with ease.

[36] The conventional clutch for the pin-type earring is made of metals, thereby making it impossible to change its shape or color into different ones. To the contrary, the backside decoration element for the pin-type earring according to the present invention can exhibit various appearances by changing the shapes and colors of the silicon outer cover into different ones.

[37] The forgoing embodiments are merely exemplary and are not to be construed as limiting the present invention. The present teachings can be readily applied to other types of apparatuses. The description of the present invention is intended to be illustrative, and not to limit the scope of the claims. Many alternatives, modifications, and variations will be apparent to those skilled in the art.